## AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Please cancel claims 5, 17, 20, and 24 without prejudice.

## **Listing of Claims:**

1. (Currently amended) A processor-implemented method for interfacing with a distributed computing service, comprising:

accessing an ontology specification describing messages of the distributed computing service;

accessing a semantic interpretation specification that describes rules for semantically exchanging data <u>handling the messages</u>, as specified in the ontology <u>specification</u>, with the distributed computing service;

entering the semantic interpretation specification into a rules engine adapted for providing processor executable procedures;

obtaining a set of procedures from the rules engine for interacting with the distributed service based on the semantic interpretation specification;

receiving a request for interfacing with the distributed service; and interfacing with the distributed computing service using the set of procedures in response to the request, wherein the interfacing comprises forming distributed computing service messages based on the ontology specification.

- 2. (Original) The method of claim 1, wherein the distributed computing service comprises a Web service.
- 3. (Original) The method of claim 1, wherein the semantic interpretation specification comprises an expert system interpretable specification.
- 4. (Original) The method of claim 3, wherein the semantic interpretation specification comprises rules usable with a rule-based expert system.

- 5. (Cancelled)
- 6. (Original) The method of claim 1, wherein interfacing with the distributed computing service using the set of procedures comprises forming a service bridge having a generic programmatic interface adapted to receive the request.
- (Currently amended) An apparatus, comprising:
   a data transfer interface for providing data connections to a distributed
   computing service; and

a processor arranged to :

access an ontology specification describing messages of the distributed computing service;

access a semantic interpretation specification describing a behavior that describes rules for semantically handling the messages, as specified in the ontology specification, used to interface with the distributed computing service;

enter the semantic interpretation specification into a rules engine adapted for providing processor executable procedures;

obtain a set of procedures from the rules engine for interacting with the data transfer service based on the semantic interpretation specification; and interface with the distributed computing service via the data transfer interface using the set of procedures, wherein the interfacing includes forming distributed computing service messages based on the ontology specification.

- 8. (Original) The apparatus of claim 7, wherein the data transfer interface comprises a network interface.
- 9. (Original) The apparatus of claim 8, wherein the distributed computing service comprises a Web service.
- 10. (Original) The apparatus of claim 8, wherein the semantic interpretation specification comprises an expert system interpretable specification.

- 11. (Original) The apparatus of claim 10, wherein the expert system rules comprise rules usable with a rule-based expert system.
- 12. (Original) The apparatus of claim 7, further comprising a memory and a service bridge module stored in the memory, the service bridge module operable via the processor to activate the set of procedures based on instructions from a generic programmatic interface of the service bridge module.
- 13. (Original) A computer-readable medium configured with instructions for causing a processor to perform steps comprising:

accessing an ontology specification describing messages of the distributed computing service;

accessing a semantic interpretation specification describing rules for semantically exchanging data handling the messages, as specified in the ontology specification, with a distributed computing service;

entering the semantic interpretation specification into a rules engine adapted for providing processor executable procedures;

obtaining a set of procedures from the rules engine for interacting with the distributed service based on the semantic interpretation specification;

receiving a request for interfacing with the distributed service; and interfacing with the distributed computing service using the set of procedures in response to the request, wherein the interfacing comprises forming distributed computing service messages based on the ontology specification.

- 14. (Original) The computer-readable medium of claim 13, wherein the distributed computing service comprises a Web service.
- 15. (Original) The computer-readable medium of claim 13, wherein the semantic interpretation specification comprises an expert system interpretable specification.

16. (Original) The computer-readable medium of claim 15, wherein the semantic interpretation specification comprises rules usable by a rule-based expert system.

## 17. (Cancelled)

- 18. (Original) The computer-readable medium of claim 13, wherein interfacing with the distributed computing service using the set of procedures comprises forming a service bridge module having a generic programmatic interface usable to execute the set of procedures.
- 19. (Currently amended) A system comprising: means for providing a distributed computing service; means for storing an ontology specification describing messages of the distributed computing service;

means for storing a semantic interpretation specification describing a behavior that describes rules for semantically handling the messages, as specified in the ontology specification, used to interface with the distributed computing service;

means for accessing the semantic interpretation specification for entry into a rules engine adapted for providing processor executable procedures;

means for accessing an ontology describing messages of the distributed computing service;

means for obtaining a set of procedures from the rules engine for interacting with the distributed service based on the semantic interpretation specification; and means for forming distributed computing service messages based on the ontology for use in the set of procedures; and

means for interfacing with the distributed computing service using the set of procedures.

## 20. (Cancelled)

21. (Currently amended) A method of interfacing with a distributed computing service comprising:

receiving a message from the distributed computing service; identifying a message type of the message for processing of the message; accessing an ontology specification describing the message type;

accessing a semantic interpretation specification describing rules for semantically <u>handling the messages</u>, as specified in the ontology specification, exchanging data with the distributed computing service based on the message type;

entering the semantic interpretation specification into a rules engine adapted for providing processor executable procedures;

obtaining a set of procedures from the rules engine for interacting with the distributed service based on the semantic interpretation specification; and

interfacing with the distributed computing service using the set of procedures in response to the message, wherein the interfacing comprises forming a distributed computing service message based on the ontology specification and outputting the message.

- 22. (Original) The method of claim 21, wherein the distributed computing service comprises a Web service.
- 23. (Original) The method of claim 21, wherein the semantic interpretation specification comprises expert system rules.
- 24. (Cancelled)
- 25. (Currently amended) A system comprising:

a first data processing arrangement configured to provide a distributed computing service;

a data storage arrangement containing <u>an ontology specification and a semantic</u> <u>interpretation specification, wherein the ontology specification describes messages of</u> <u>the distributed computing service, and the</u> **[[a]]** semantic interpretation specification

<u>describes</u> <u>describing a behavior rules for semantically handling the messages, as</u> <u>specified in the ontology specification,</u> used to interface with the distributed computing service;

a second data processing arrangement having a rules engine adapted for providing processor executable procedures, the second data processing arrangement configured to:

receive a request to interface with the distributed computing service;

accessing the ontology specification from the data storage arrangement;

access the semantic interpretation specification from the data storage
arrangement;

enter the semantic interpretation specification into the rules engine; obtain a set of procedures from the rules engine for interacting with the distributed service based on the semantic interpretation specification; and interface with the distributed computing service using the set of procedures, wherein the interfacing includes forming distributed computing service messages based on the ontology specification.

- 26. (Original) The system of claim 25, wherein the distributed computing service comprises a Web service.
- 27. (Original) The system of claim 25, wherein the a data storage arrangement is adapted for providing the semantic interpretation specification via a network.
- 28. (Original) The system of claim 25, wherein the semantic interpretation specification comprises expert system rules.